

Water-Data Report 2009

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, NM

Rio Grande-Elephant Butte Basin
Jemez Subbasin

LOCATION.--Lat 35°23'25.5", long 106°32'04.6" referenced to North American Datum of 1983, Sandoval County, NM, Hydrologic Unit 13020202, on right bank 0.8 mi downstream from Jemez Canyon Dam, 2.0 mi upstream from mouth, and 6.0 mi north of Bernalillo.

DRAINAGE AREA.--1,038 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1936 to January 1938, March 1943 to current year. Published as "Jemez Creek" prior to 1948, and as "near Bernalillo" prior to 1954.

REVISED RECORDS.--WSP 1178: 1949. WSP 1212: 1950. WSP 1512: 1936, 1943, 1945, 1947-48, 1949(M), 1950. WSP 1732: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,095.60 ft above NGVD of 1929 (U.S. Army Corps of Engineers benchmark). Prior to Apr. 24, 1951, at site 0.8 mi upstream at datum 24.51 ft higher. Apr. 24, 1951, to June 25, 1958, at site 37 ft upstream at datum 4.40 ft above present datum. Supplementary water-stage recorder at gages on Jemez Canyon Dam at datum 5,125.00 ft above NGVD of 1929 (U.S. Army Corps of Engineers benchmark) used at times since Jan. 1953.

REMARKS.--Records poor. Subsequent to October 1953, flow at this station can be completely regulated by Jemez Canyon Reservoir (station 08328500). However, reservoir is designed essentially for desilting and flood control rather than storage. Diversions for irrigation of about 3,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1900 was probably less than 16,000 ft³/s but highest observed outside period of record.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e0.00	e3.8	e4.6	e17	e24	e63	e48	e233	e21	e1.0	e2.0	e0.00
2	e0.00	e4.0	e4.6	e17	e24	e69	e47	e230	e18	e0.00	e0.10	e0.00
3	e0.00	e3.6	e5.8	e17	e22	e87	e13	e237	e17	e0.00	e0.00	e0.00
4	e0.00	e4.2	e3.1	e18	e21	e124	e7.3	e225	e16	e0.00	e0.00	e0.00
5	e52	e4.3	e2.9	e15	e18	e133	e14	e219	e20	e0.00	e0.00	e0.00
6	e17	e4.3	e3.9	e23	e15	e112	e15	e234	e22	e0.50	e0.00	e0.00
7	e25	e3.3	e8.0	e19	e20	e93	e11	e225	e9.9	e5.0	e0.00	e0.00
8	e17	e4.8	e8.2	e19	e17	e68	e115	e221	e7.2	e1.0	e0.00	e0.00
9	e5.7	e6.1	e7.6	e18	e24	e71	e27	e213	e5.9	e0.00	e0.00	e0.00
10	e4.0	e6.5	e1.4	e14	e20	e67	e34	e187	e20	e0.00	e0.00	e0.30
11	e6.7	e6.9	e3.3	e17	e20	e51	e57	e164	e50	e0.00	e0.00	e0.20
12	e9.8	e6.8	e6.0	e19	e21	e53	e97	e147	e44	e0.00	e0.00	e13
13	e10	e7.0	e7.2	e17	e22	e59	e69	e117	e22	e0.00	e0.00	e1.8
14	e7.2	e7.6	e3.7	e20	e20	e114	e59	e105	e21	e0.00	e0.00	e2.5
15	e4.9	e6.8	e1.6	e17	e16	e42	e94	e88	e22	e0.00	e0.00	e9.0
16	e3.1	e5.5	e3.7	e19	e22	e41	e165	e60	e12	e0.00	e0.00	e28
17	e3.4	e5.5	e6.6	e19	e20	e38	e173	e55	e7.3	e0.00	e0.00	e268
18	e1.8	e6.4	e8.2	e20	e19	e47	e169	e45	e4.1	e0.00	e0.00	e100
19	e1.8	e7.0	e8.4	e19	e18	e46	e131	e39	e0.50	e0.00	e0.00	e6.2
20	e2.9	e6.5	e3.1	e14	e20	e64	e141	e23	e7.4	e0.00	e0.00	e205
21	e2.9	e6.3	e5.3	e18	e19	e72	e117	e20	e18	e0.00	e0.00	e17
22	e3.1	e6.0	e8.2	e20	e12	e76	e118	e25	e2.5	e33	e0.00	e8.0
23	e3.1	e4.5	e7.2	e16	e13	e83	e133	e44	e1.0	e4.5	e0.00	e2.0
24	e2.6	e3.7	e4.7	e22	e12	e90	e158	e48	e0.00	e1.0	e0.00	e0.00
25	e2.4	e4.5	e5.7	e26	e9.4	e77	e179	e77	e0.00	e1.0	e0.00	e0.00
26	e2.4	e5.8	e7.0	e22	e182	e67	e195	e85	e43	e0.00	e0.00	e0.00
27	e1.8	e7.4	e7.9	e23	e8.4	e66	e192	e48	e145	e0.00	e0.00	e0.00
28	e2.6	e10	e1.9	e17	e27	e60	e186	e44	e17	e0.10	e0.00	e0.00
29	e3.1	e6.7	e8.9	e19	---	e66	e192	e38	e18	e0.10	e0.00	e0.00
30	e3.9	e5.7	e7.5	e24	---	e66	e224	e33	e6.3	e0.00	e0.00	e0.00
31	e3.8	---	e7.0	e22	---	e49	---	e23	---	e0.10	e0.00	---
Total	204.00	171.5	173.2	587	685.8	2,214	3,180.3	3,552	598.10	47.30	2.10	661.00
Mean	6.58	5.72	5.59	18.9	24.5	71.4	106	115	19.9	1.53	0.07	22.0
Max	52	10	8.9	26	182	133	224	237	145	33	2.0	268
Min	0.00	3.3	1.4	14	8.4	38	7.3	20	0.00	0.00	0.00	0.00
Ac-ft	405	340	344	1,160	1,360	4,390	6,310	7,050	1,190	94	4.2	1,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2009, BY WATER YEAR (WY)

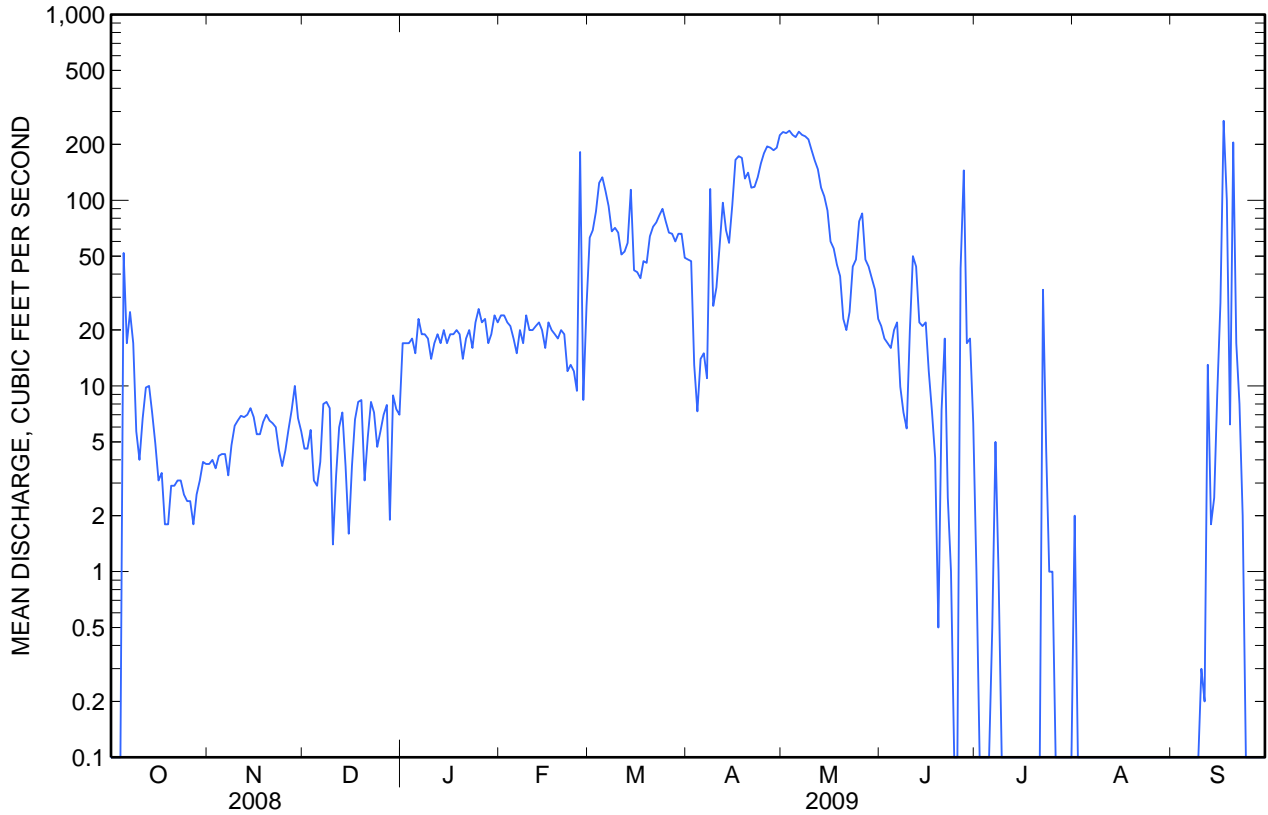
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	29.0	27.2	20.6	23.2	28.0	66.3	179	179	68.7	23.7	41.0	23.1
Max	193	179	74.4	67.9	75.1	288	772	968	988	358	247	157
(WY)	(1987)	(1958)	(1987)	(1999)	(1987)	(1995)	(1985)	(1973)	(1958)	(1987)	(1991)	(1988)
Min	0.00	2.22	0.20	0.25	0.34	7.77	0.96	0.00	0.00	0.00	0.07	0.00
(WY)	(1956)	(1997)	(1985)	(1985)	(1985)	(2002)	(1996)	(1972)	(1946)	(1947)	(2009)	(1945)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1943 - 2009	
Annual total	14,332.82		12,076.30			
Annual mean	39.2		33.1		59.5	
Highest annual mean					178	1973
Lowest annual mean					10.6	1953
Highest daily mean	241	Mar 28	268	Sep 17	3,640	Jun 19, 1958
Lowest daily mean	0.00	Jul 31	0.00	Oct 1	0.00	May 24, 1943
Annual seven-day minimum	0.00	Sep 6	0.00	Jul 9	0.00	May 24, 1943
Maximum peak flow					^a 16,300	Aug 29, 1943
Maximum peak stage					12.36	Apr 8, 2009
Instantaneous low flow			0.00	Oct 1	0.00	Oct 23, 2003
Annual runoff (ac-ft)	28,430		23,950		43,070	
10 percent exceeds	143		113		148	
50 percent exceeds	12		9.0		17	
90 percent exceeds	0.00		0.00		0.00	

^a From rating curve extended above 3,000 ft³/s.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-1988, 1990-1996, 2004 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Baro- metric pres- sure, mm Hg (00025)	Temper- ature, air, deg C (00020)	Instan- taneous dis- charge, ft ³ /s (00061)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unf lab, µS/cm @ 25 degC (90095)	Specif- ic conduc- tance, wat unf lab, µS/cm @ 25 degC (00095)	Temper- ature, water, deg C (00010)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)	Calcium water, fltrd, mg/L (00915)
Apr 23...	1025	638	22.0	13	11.2	8.3	8.0	465	457	12.5	1,380	287	31.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka- linity, wat flt inf tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt infl pt titr., mg/L (00453)	Carbon- ate, wat flt infl pt titr., mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
Apr 23...	3.95	5.65	48.4	118	114	136	1	45.7	.53	22.0	32.0	.47	1.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	E coli, m-TEC MF, col/ water, 100 mL (31633)	Fecal coli- form, M-FC 0.7u MF col/ water, 100 mL (31625)	Alum- inum, water, fltrd, µg/L (01106)	Barium, water, fltrd, µg/L (01005)	Beryll- ium, water, fltrd, µg/L (01010)	Cadmium water, fltrd, µg/L (01025)	Chrom- ium, water, fltrd, µg/L (01030)
Apr 23...	<.020	<.08	<.002	.020	.021	1.08	160	E160	5.1	62	E.01	.02	.23

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Cobalt	Copper,	Iron,	Lead,	Lithium	Mangan-	Mercury	Molyb-	Nickel,	Silver,	Stront-	Thall-	Vana-
	water, fltrd, µg/L (01035)	water, fltrd, µg/L (01040)	water, fltrd, µg/L (01046)	water, fltrd, µg/L (01049)	water, fltrd, µg/L (01130)	ese, water, fltrd, µg/L (01056)	water, fltrd, µg/L (71890)	denum, water, fltrd, µg/L (01060)	water, fltrd, µg/L (01065)	water, fltrd, µg/L (01075)	ium, water, fltrd, µg/L (01080)	ium, water, fltrd, µg/L (01057)	dium, water, fltrd, µg/L (01085)
Apr 23...	.12	1.9	17	.16	291	3.0	<.010	2.3	.70	M	321	<.04	4.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Zinc,	Anti-	Arsenic	Boron,	Selen-	Organic	Uranium	Sus-
	water, fltrd, µg/L (01090)	mony, water, fltrd, µg/L (01095)	water, fltrd, µg/L (01000)	water, fltrd, µg/L (01020)	ium, water, fltrd, µg/L (01145)	carbon, water, fltrd, mg/L (00681)	natural water, fltrd, µg/L (22703)	pended sedi- ment concen- tration mg/L (80154)
Apr 23...	2.6	.12	19.1	343	.25	7.2	1.28	<.5